

DESCRIPTION AND MAINTENANCE INSTRUCTIONS

ENGINES PISTON TYPE - GENERAL

OIL PRIMING

(This EO replaces EO 10A-1-2AC M2/19/2 dated 31 Oct 43)

1 Aircraft engines are to be primed with either hot or diluted oil on the following occasions:

- (a) When the engine is first installed.
- (b) When the engine has not been run for more than five days.

2 Unless otherwise specified in the relevant EO's of the equipment concerned, the procedure hereunder is to be followed:

- (a) Remove the oil sump plugs before priming the engine and drain the same quantity of oil from the system that is to be used in priming.
- (b) Remove a spark plug from each cylinder.
- (c) If the engine is equipped with a hydro-matic propeller, remove the plug from the propeller dome. Pour a quantity of oil into the dome to bring the oil to the level of the plug hole. Reinstall the plug in the propeller dome.
- (d) Remove the pressure gauge line at the engine.
- (e) Attach the Engine Pre-Oiler Tank (Type B-1) RCAF Ref. 4G/1472 (USAF Spec.

94-40795, USAF Part 44G 6496), to the pressure gauge connection by a suitable adaptor. This Type B-1 Pre-Oiler is supplied complete with hose and adaptors.

(f) Prime the engine, under a pressure 45 to 60 lbs. per sq. in. with the type of oil specified in EO 45-1-2. This oil is to be heated to a temperature of 50°C to 70°C (122°F to 158°F). If heating facilities are not available, the oil is to be diluted by the addition of 10% aviation gasoline.

(g) During the oil priming operation, the engine is to be turned by the hand turning gear through at least four revolutions to ensure that oil reaches all the bearings.

3 The quantity of oil to be injected during the oil priming operation is as follows:

- (a) One and one half gallons for single row radial engines.
- (b) Two gallons for twin row radial engines.
- (c) Two gallons for Merlin engines.
- (d) One gallon for smaller in-line engines such as the Gypsy & Ranger.

ISSUED ON AUTHORITY OF THE CHIEF OF THE AIR STAFF